

Retrieval Functions

This section covers the following topics:

- GA - Get Attributes of Object Type
- GL - Get Linked Objects
- GO - Get Owners of Object
- GV - Get Values of Attributes
- HO - Get Owners of Object
- HV - Hold Values
- PV - Return Predict Version

GA - Get Attributes of Object Type

The function returns the metadata definitions of the object type. The following information is retrieved for different attributes:

- Attribute name,
- will upper/lower case translation be performed for alphanumeric fields,
- the data type (alphanumeric or numeric) of attributes,
- the length of attribute fields (for numeric fields including the decimal places),
- decimal places of numeric fields.

Input Fields

Field Name	Format	Description
#OBJECT-TYPE	A2	Predict Object Type
#SYSDIC-USER	A250	User area

Output Fields

Field Name	Format	Description
#ATTR-NAME (1:80)	A32	Name of the attribute
#UP-LOW (1:80)	A1	Upper/lower case conversion
#FORMAT (1:80)	A1	Data type of attribute field
#LENGTH (1:80)	N2	Length of attribute field
#DEC-POS (1:80)	N1	Number of decimal places
#IN-COL (1:80)	N8	Line/column for attribute name and value
#SCR-NUM (1:80)	N2	Number of the screen in which the attribute is used
#ED-MASK (1:80)	N2	Type of the edit mask
#RULE (1:80)	A2	Type of the verification rule
#OCC (1:80)	N2	Position of the attribute within the record
#MAINTENANCE-DATE (1)	T	Date and time of creation
#MAINTENANCE-ACTION(1)	A8	ID of user who created the object
#MAINTENANCE-DATE (2)	T	Date and time of modification
#MAINTENANCE-ACTION(2)	A8	ID of user who modified the object
#SYSDIC-USER	A250	User area
#RESP-CODE	I2	Predict error message number
#RESP-TEXT1	A34	Text for parameter 1 used in the error message
#RESP-TEXT2	A34	Text for parameter 2 used in the error message

GL - Get Linked Objects

This function retrieves all objects that are linked to a specified object via an association code. All links to an object are stored in link records. Up to 50 objects can be stored in one link record. A maximum of 999 link records per object for one association code can exist.

Each call of the function reads one link record. An input loop must be coded to read more than one link record.

The fields #CHILD-NUMBER and #CHILD-COUNTER are used to specify how many lines of the extended description are read (see example below).

Input Fields

Field Name	Format	Description
#OBJECT-TYPE	A2	Predict Object Type
#ASSO-TYPE	A2	Predict Association Code
#OBJECT-ID	A64	consists of: #OBJECT-NAME (A32) Predict Object ID #OBJECT-FILE-NAME (A32) Predict Object ID of a file (only used for elementary fields)
#SYSDIC-USER	A250	User area
#CHILD-COUNTER	N4	Must be incremented for each call of the GL function (if called more than once; see example below). Note that #CHILD-COUNTER=1 after the first record of linked objects has been read.

Output Fields

Field Name	Format	Description
#CHILD-NUMBER	N4	Number of existing link records; is returned after the first execution of the function. Can be used as end value of a loop if more than one child record is to be read.
#CHILD-NAME (1:50)	A64	consists of: Object ID of linked child (A32) Object ID of a file (A32) (only used for elementary fields)
#SYSDIC-USER	A250	User area
#RESP-CODE	I2	Predict error message number
#RESP-TEXT1	A34	Text for parameter 1 used in the error message
#RESP-TEXT2	A34	Text for parameter 2 used in the error message

Example

```

DEFINE DATA LOCAL
    USING PALPUD42
END-DEFINE
*
#FUNCTION      = 'GL'
#OBJECT-TYPE   = 'OO'
#OBJECT-ID     = 'ULH-OO-FILLED'
*
REPEAT
    CALLNAT 'PALUD42' #FUNCTION #OBJECT-TYPE #CHILD-TYPE #OBJECT-ID
                    #OBJECT-COMPLETE #MAINTENANCE-ACTIVITY #RESP-GR
                    #SYSDIC-USER #INTERNAL #API-INFO(*)
*
    DISPLAY #CHILD-NAME(*)
    ADD 1 TO #CHILD-COUNTER
    IF #CHILD-COUNTER > #CHILD-NUMBER
        ESCAPE BOTTOM
LOOP
END

```

GO - Get Owners of Object

The function reports all owners of an object.

Input Fields

Field Name	Format	Description
#OBJECT-TYPE	A2	Object Type
#OBJECT-ID	A64	consists of: #OBJECT-NAME (A32) Predict Object ID #OBJECT-FILE-NAME (A32) Predict Object ID of a file (only used for elementary fields)
#SYSDIC-USER	A250	User area

Output Fields

Field Name	Format	Description
#OWNER (1:99)	A32	Owner IDs
#SYSDIC-USER	A250	User area
#RESP-CODE	I2	Predict error message number
#RESP-TEXT1	A34	Text for parameter 1 used in the error message
#RESP-TEXT2	A34	Text for parameter 2 used in the error message

GV - Get Values of Attributes

The function reports attribute values of an object. The following values are retrieved:

- Numeric attribute values.
- Alphanumeric attribute values.
- Abstract and keywords.
- Whether owners or descriptions are specified for the object.

Input Fields

Field Name	Format	Description
#OBJECT-TYPE	A2	Object Type
#OBJECT-ID	A64	consists of: #OBJECT-NAME (A32) Predict Object ID #OBJECT-FILE-NAME (A32) Predict Object ID of a file (only used for elementary fields)
#SYSDIC-USER	A250	User area

Output Fields

Field Name	Format	Description
#ALPHA-VALUES (1:80)	A78	Values of alphanumeric fields
#NUM-VALUES (1:80)	P27	Values of numeric fields
#SHORT-COMMENTS (1:16)	A30	Abstract
#KEYWORDS (1:32)	A32	Keywords
#OWNER-YN	A1	Y if owner is specified, else N
#DESC-YN	A1	Y if description is specified, else N
#MAINTENANCE-DATE (1)	T	Date and time of creation
#MAINTENANCE-ACTION(1)	A8	ID of user who created the object
#MAINTENANCE-DATE (2)	T	Date and time of modification
#MAINTENANCE-ACTION(2)	A8	ID of user who modified the object
#SYSDIC-USER	A250	User area
#RESP-CODE	I2	Predict error message number
#RESP-TEXT1	A34	Text for parameter 1 used in the error message
#RESP-TEXT2	A34	Text for parameter 2 used in the error message

HO - Get Owners of Object

This function reports all owners of an object. The object is put into HOLD while the function is executed.

If the owner list of an object is to be modified, this function should be called first. There are two reasons for this recommendation:

- The object is put in HOLD.
- The modify function MO always overwrites the complete owner list. If for example only one owner is added or changed, all other owners would be overwritten with blanks. Calling HO before modifying any owner ensures that all owners are stored in the respective fields of PALPUD42 and therefore kept when old definition is overwritten.

Input Fields

Field Name	Format	Description
#OBJECT-TYPE	A2	Object Type
#OBJECT-ID	A64	consists of: #OBJECT-NAME (A32) Predict Object ID #OBJECT-FILE-NAME (A32) Predict Object ID of a file (only used for elementary fields)
#SYSDIC-USER	A250	User area

Output Fields

Field Name	Format	Description
#OWNER (1:99)	A32	Owner IDs
#SYSDIC-USER	A250	User area
#RESP-CODE	I2	Predict error message number
#RESP-TEXT1	A34	Text for parameter 1 used in the error message
#RESP-TEXT2	A34	Text for parameter 2 used in the error message

HV - Hold Values

The function reports attribute values of an object and puts the object into HOLD while the function is executed. The following values are retrieved:

- Numeric attribute values.
- Alphanumeric attribute values.
- Abstract and keywords.
- Whether owners or descriptions are specified for the object.

If attribute values of an object are to be modified, this functions should be called first. There are two reasons for this recommendation:

- The object is put in HOLD.
- The modify function MV always overwrites the complete attribute definition of an object. If only one attribute is changed, all other attributes would be overwritten with blanks. Calling the function HV before modifying any attribute values ensures that the old attribute values are stored in the respective fields of PALPUD42 and therefore kept when the old definition is overwritten.

Input Fields

Field Name	Format	Description
#OBJECT-TYPE	A2	Predict Object Type
#OBJECT-ID	A64	consists of: #OBJECT-NAME (A32) Predict Object ID #OBJECT-FILE-NAME (A32) not used
#SYSDIC-USER	A250	User area

Output Fields

Field Name	Format	Description
#ALPHA-VALUES (1:80)	A78	Values of alphanumeric fields
#NUM-VALUES (1:80)	P27	Values of numeric fields
#SHORT-COMMENTS (1:16)	A30	Abstract
#KEYWORDS (1:32)	A32	Keywords
#OWNER-YN	A1	Y if owner is specified, else N
#DESC-YN	A1	Y if description is specified, else N
#MAINTENANCE-DATE (1)	T	Date and time of creation
#MAINTENANCE-ACTION(1)	A8	ID of user who created the object
#MAINTENANCE-DATE (2)	T	Date and time of modification
#MAINTENANCE-ACTION(2)	A8	ID of user who modified the object
#SYSDIC-USER	A250	User area
#RESP-CODE	I2	Predict error message number
#RESP-TEXT1	A34	Text for parameter 1 used in the error message
#RESP-TEXT2	A34	Text for parameter 2 used in the error message

PV - Return Predict Version

The function PV returns the current Predict Version.

Input Fields

None.

Output Fields

Field Name	Format	Description
#Predict-VERSION	N3	Current Predict version